

Abstract

A fuel injection valve for internal combustion engines, having a valve body (1) in which a bore (3) is embodied that is defined on its end toward the combustion chamber by a conical valve seat (12). A pistonlike valve needle (5) is disposed longitudinally displaceably in the bore (3) and on its end toward the combustion chamber has a valve sealing face (10) which includes two conical faces (20; 22). The second conical face (22) being disposed on the combustion chamber side of the first conical face (20), and an annular groove (25) extends between the conical faces (20; 22), and its end facing away from the combustion chamber, upon contact of the valve sealing face (10) with the valve seat (12), acts as sealing edge (27). Recesses (35) are embodied at the valve seat (12) and/or on the valve sealing face (10) that hydraulically connect the annular groove (25) with a portion of the second conical face (22) located on the combustion chamber side of the annular groove (25) (Fig. 3, Fig. 10).